In the Claims

Please replace all prior versions, and listings, of claims in the application with the following list of claims:

1. (Currently amended) A semiconductor component in which the active junctions extend perpendicularly to a first [[the]] surface of a semiconductor chip substantially across an entire thickness thereof, wherein the semiconductor chip has a first metallization associated with the first surface and a second metallization associated with a second surface, the first and second surfaces being on opposing sides of the semiconductor chip.

2. (Original) The semiconductor component of claim 1, wherein the contacts with the regions to be connected are provided by conductive fingers substantially crossing an entire region with which a contact is desired to be established.

3. (Original) The semiconductor component of claim 2, wherein the conductive fingers are metal fingers.

4. (Currently amended) The semiconductor component of claim 1, of multicellular type, wherein the junctions are formed of several cylinders perpendicular to the first surface ~~main substrate surfaces~~.

5. (Currently amended) A diode according to claim 1, comprising an alternation of regions of a first conductivity type and of a second conductivity type extending across the entire substrate thickness, the regions of a first type being crossed by conductive fingers connected to [[a]] the first metallization extending over an entire surface of the substrate, and the regions of the second type being crossed by conductive fingers connected to [[a]] the second metallization ~~on the other substrate surface~~.

6. (Original) The diode of claim 5, formed in an N-type semiconductor substrate, wherein the conductive fingers penetrating into the N-type regions are surrounded with heavily-

doped N-type regions.

7. (Original) A bipolar transistor according to claim 1, alternately comprising a region of a first conductivity type, a region of a second conductivity type, and a region of the first conductivity type, each of these regions extending across the entire thickness of the substrate and being in contact with at least one conductive finger, each of these conductive fingers being respectively connected to an emitter metallization, to a base metallization, and to a collector metallization.

8. (Original) A thyristor according to claim 1, successively comprising a first region of a first conductivity type, a second region of the second conductivity type, a third region of the first conductivity type, and fourth region of the second conductivity type, each of these regions extending across the entire substrate thickness, a conductive finger extending into the entire first region, at least one conductive finger extending into the entire second region, and at least one conductive finger extending into the entire fourth region.

9. (Original) The thyristor of claim 8, wherein the first conductivity type is type N and the second conductivity type is type P, the first region being a cathode region and the fourth region an anode region, and wherein localized metallizations extend vertically between the gate region and the cathode region to form localized gate-cathode short-circuits.

10. (New) A semiconductor component in which the active junctions extend perpendicularly to a surface of a semiconductor chip substantially across the entire thickness thereof, wherein contacts with regions to be connected are provided by metal fingers substantially crossing an entire region within the semiconductor chip with which a contact is desired to be established.

11. (New) The semiconductor component of claim 10, of multicellular type, wherein the junctions are formed of several cylinders perpendicular to the main substrate surfaces.

12. (New) A diode according to claim 10, comprising an alternation of regions of a

first conductivity type and of a second conductivity type extending across the entire substrate thickness, the regions of a first type being crossed by conductive fingers connected to a metallization extending over an entire surface of the substrate, and the regions of the second type being crossed by conductive fingers connected to a metallization on the other substrate surface.

13. (New) The diode of claim 12, formed in an N-type semiconductor substrate, wherein the conductive fingers penetrating into the N-type regions are surrounded with heavily-doped N-type regions.

14. (New) A bipolar transistor according to claim 10, alternately comprising a region of a first conductivity type, a region of a second conductivity type, and a region of the first conductivity type, each of these regions extending across the entire thickness of the substrate and being in contact with at least one conductive finger, each of these conductive fingers being respectively connected to an emitter metallization, to a base metallization, and to a collector metallization.

15. (New) A thyristor according to claim 10, successively comprising a first region of a first conductivity type, a second region of the second conductivity type, a third region of the first conductivity type, and fourth region of the second conductivity type, each of these regions extending across the entire substrate thickness, a conductive finger extending into the entire first region, at least one conductive finger extending into the entire second region, and at least one conductive finger extending into the entire fourth region.

16. (New) The thyristor of claim 15, wherein the first conductivity type is type N and the second conductivity type is type P, the first region being a cathode region and the fourth region an anode region, and wherein localized metallizations extend vertically between the gate region and the cathode region to form localized gate-cathode short-circuits.

17. (New) A semiconductor component, comprising:

a substrate;

a first region of a first conductivity type that extends through the substrate;

a second region of a second conductivity type that extends through the substrate;

a p-n junction between the first region and the second region that extends through the substrate;

a first contact that extends through the substrate and contacts the first region; and

a second contact that extends through the substrate.

18. (New) The semiconductor component of claim 17, wherein the p-n junction is at a junction of the first region and the second region.

19. (New) The semiconductor component of claim 17, wherein the first contact and the second contact are metal contacts.

20. (New) The semiconductor component of claim 17, wherein the first contact is arranged in a plane.

21. (New) The semiconductor component of claim 20, wherein the plane is substantially parallel to a main surface of the substrate.

22. (New) The semiconductor component of claim 17, wherein the first contact is arranged as a cylinder.

23. (New) The semiconductor component of claim 17, wherein the first region of the first conductivity type comprises a highly doped region of the first conductivity type that contacts the first contact.

24. (New) The semiconductor component of claim 17, further comprising a first metallization that contacts the first contact, the first metallization being on a first main surface of the substrate.

25. (New) The semiconductor component of claim 24, further comprising a second metallization that contacts the second contact, the second metallization being on a second main

surface of the substrate.

26. (New) The semiconductor component of claim 25, wherein the first main surface and the second main surface are on opposing sides of the substrate.

27. (New) The semiconductor component of claim 17, wherein the first conductivity type is type N and the second conductivity type is type P.

28. (New) The semiconductor component of claim 17, wherein the semiconductor component comprises a diode.

29. (New) The semiconductor component of claim 28, wherein the semiconductor component comprises a plurality of diodes in the substrate.

30. (New) The semiconductor component of claim 29, wherein at least two of the plurality of diodes are connected in parallel or series.

31. (New) The semiconductor component of claim 29, wherein at least two of the plurality of diodes are connected in series opposition.

32. (New) The semiconductor component of claim 29, wherein at least two of the plurality of diodes are connected in antiparallel.

33. (New) The semiconductor component of claim 17, wherein the second contact contacts the second region.

34. (New) The semiconductor component of claim 17, further comprising a conductive finger extending through the second region.

35. (New) The semiconductor component of claim 34, wherein the conductive finger comprises a base of a bipolar transistor or a gate of a thyristor.

36. (New) The semiconductor component of claim 17, further comprising:

a third region of first conductivity type that contacts the second region and the second contact and extends through the substrate.

37. (New) The semiconductor component of claim 36, wherein the semiconductor component comprises a bipolar transistor.

38. (New) The semiconductor component of claim 17, further comprising:

a fourth region of the second conductivity type that contacts the first region and the third region and extends through the substrate.

39. (New) The semiconductor component of claim 38, wherein the semiconductor component comprises a thyristor.